

TEACHING METHODS AND COURSE CHARACTERISTICS RELATED TO COLLEGE  
STUDENTS' DESIRE TO TAKE A COURSE

by

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B.S., Langston University, 2003  
M.Ed., Washington State University, 2004

AN ABSTRACT OF A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Special Education, Counseling, and Student Affairs  
College of Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

2009

## ABSTRACT

This study examined some factors that are related to college students' desire to take a course from a specific instructor. College students' ratings of their instructor's teaching methods, the course circumstances, and the course requirements were correlated with students' desire to take the course from that instructor. Data came from archival data of 184,017 classes of faculty and students who responded to two instruments within the IDEA Student Ratings system: *the Faculty Information Form (FIF)*, completed by the instructor, and the *Student Ratings Diagnostic Form*, completed by students. Descriptive statistics, correlational statistics, multiple regression analyses were conducted to test the research hypotheses. Students had a stronger desire to take the course if the instructor practiced methods that stimulated interest, fostered collaboration, established rapport, encouraged involvement, and structured the classroom experience. Stimulating student interest and establishing rapport had the strongest effects on students' desire to take the course. Students' desire to take the course also increased if the instructor used a variety of methods to evaluate student progress, expected students to take their share of responsibility for learning, and used educational technology to promote learning. The findings from this study provide higher education institutions with information about which instructor and course characteristics correlate with students' desire to take a course.

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## Acknowledgements

I would like to express my appreciation to Dr. Stephen Benton, Dr. David Griffin Sr., Dr. Doris Wright-Carroll, and Dr. Aaron Carlstrom, and Dr. Jacque Gibbons for serving as my dissertation committee. As chair, Dr. Benton has offered wisdom and invaluable direction that has helped me to complete this dissertation study. I credit Dr. Benton, Dr. Carroll-Wright, and Dr. Griffin as my first contacts at Kansas State and for believing in me and allowing me to enter into the doctoral program.

I would like to thank Dr. Rankin, Dr. Stoney, Dr. Webb, Dr. Hughey, and Dr. Calstrom for being listening ears and for all the advice they offered. Special thanks to Tiffany L. Brown, Rachel Anderson, Shiron Patterson, The Threatt's, The Price's, Dr. Jones, The Ponds, The Bluitt's, The Ansivino's, Marie Parker, and The Millhouses for showing love, support and understanding. Special thanks to the Langston family: Dr. Darlene Abram, Dr. Randy Hunt, and Mrs. Gail Anderson for believing in me and always encouraging and motivating me during this process.

I would like to thank the members of my family for their support throughout this process: my brothers--Joe III, Damon, Jerrone, and Daquant--my sisters, Jaquay and Monique; and my parents, Joe and Mildred Hornbeak. My parents always emphasized the value of an education and impressed upon me that I should use my talents to the best of my ability. My father challenged me to think and helped to nurture my intellectual development.

Finally, I am grateful to staff members of the IDEA Center who were involved in this process. I especially thank Dr. Bill Pallett, President of the IDEA Center, for allowing me to use the secondary data.



## Dedication

I dedicate this dissertation to my paternal grandparents, the late Joe and Christine Hornbeak, and my maternal grandparents, Tommie Smith and Junior Hill. My grandparents have always showed love and support throughout my childhood. I will always love them and never forget them. Thanks for everything!

## CHAPTER 1

### STATEMENT OF THE PROBLEM

#### *Statement of the Problem*

According to Basken (2008) higher education institutions face several dilemmas, including smaller endowments, decreased budgets, and lack of availability of student loans. Although college students have fewer funds available, they are faced with the dilemma of selecting courses that will count toward a major and not just fulfill their personal interests. Furthermore, the current economic crisis forces students to make careful course selection decisions, sometimes guided by university faculty and staff. Therefore, a major concern is to learn the factors that are related to a student's desire to take a course. How do college students' make these decisions? What factors are related to students' decisions to take a course? Which teaching methods are most strongly correlated with a student's desire to take a course from a certain instructor? Do the amount of reading, amount of work, and difficulty of the subject matter correlate with students' desire to take a course? Are instructors' performance standards for students related to the decision? How do the variety of teaching methods employed and technology used correlate with students' motivation to enroll in a course? These are the kinds of questions this study examined.

#### *Significance of the Study*

The results of this study could have implications for providing higher education institutions with information about what motivates students to take a course and about which instructor behaviors are related to students' desire to take a course. Specifically, this study focuses on teaching methods, course requirements, and course circumstances. The findings from this study provide instructors and administrators insight into students' attitudes and reasons for selecting particular courses.

### *Purpose of the Study*

Although, course selection is a domain worthy of study, researchers have left the field relatively unexplored. Institutions of higher education invest great efforts and resources in guiding students through the process of making optimal decisions about which courses to take (Babad and Tayeb, 2003). Prior to each semester, students make a series of interdependent course selection decisions, choosing the specific academic subjects (lectures, seminars, labs, etc.) that will comprise their curriculum during the next term. Furthermore, these decisions affect students' lives financially, socially, and intellectually. The choices they make may limit or expand their future educational and occupational opportunities more than they realize at the time, because early decisions can affect later choices and reduce further possibilities (p. 374). Babad and Tayeb (2003) argued students are drawn to courses that have effective instructors who create a positive classroom environment and establish rapport with their students. The purpose of this study is to examine some teaching methods, course circumstances, and course requirements that correlate with students' desire to take a course. Specifically, the following research questions were be addressed:

### *Research Questions*

1. Do college students' ratings of the frequency with which their instructor applies certain teaching methods correlate with a students' desire to take a course from a specific instructor?

Are students' ratings of how frequently their instructor uses methods for stimulating student interest correlated with their desire to take a course?

1.1 Which methods for stimulating student interest are most highly correlated with that desire?

- 1.2 Are student ratings of how frequently their instructor uses methods for fostering student collaboration correlated with their desire to take a course?
  - 1.2.1 Which methods for fostering student collaboration are most highly correlated with that desire?
- 1.3 Are students' ratings of how frequently their instructor uses methods for establishing rapport correlated with their desire to take a course?
  - 1.3.1 Which methods for establishing rapport are most highly correlated with that desire?
- 1.4 Are students' ratings of how frequently their instructor uses methods for encouraging student involvement correlated with their desire to take a course?
  - 1.4.1 Which methods for encouraging student involvement are most highly correlated with that desire?
- 1.5 Are students' ratings of how frequently their instructor uses methods for structuring the course experience correlated with their desire to take a course?
  - 1.5.1 Which methods for structuring the course experience are most highly correlated with that desire?
- 2. Are student ratings of course characteristics related to students' desire to take a course from a specific instructor?
  - 2.1 Does the extent to which the instructor uses a variety of assessment methods correlate with that desire?
  - 2.2 Does the extent to which the instructor expects students to take their share of responsibility for learning correlate with their desire to take a course?

- 2.3 Does the extent to which the instructor uses educational technology (e.g., Internet, e-mail, computer exercises, and multi-media presentations) correlate with students' desire to take a course?
- 3. Are students' ratings of course requirements related to students' desire to take a course from a specific instructor?
  - 3.1 Are students' perceptions of the difficulty of the subject matter correlated with their desire to take a course?
  - 3.2 Are students' perceptions of the amount of reading correlated with their desire to take a course?
  - 3.3 Are students' perceptions of the amount of work in other (nonreading) assignments correlated with their desire to take a course?

To answer these questions, data were analyzed from archived files at The IDEA Center. The IDEA Center is a nonprofit organization dedicated to helping postsecondary institutions improve learning, teaching, and leadership performance. The IDEA Student Ratings of Instruction system was developed at Kansas State University during the 1968-69 school years with the help of a grant from the W.K. Kellogg Foundation grant. The IDEA Center was established in 1975, and the IDEA Student Ratings system was made available at that time to other colleges and universities. Approximately 150 institutions now currently use The IDEA Student Ratings of instruction system.

The analyses in this study were performed on two instruments within the IDEA Student Ratings system: the *Faculty Information Form* (FIF), completed by the instructor, and the *Student Ratings Diagnostic Form*, completed by students. The experimenter performed a

series of correlational analyses, descriptive statistics, multiple regression analyses. Chapter 3 provides detailed information about the IDEA instruments and the intended analyses.

### *Limitations of the Study*

There are several limitations of this study that restrict both generalizability and methods. First, the sample was one of convenience. The population of student ratings data used for this study came from The IDEA Center's clients during the years 2002 to 2007, comprised of 572,332 classes. Any statistical generalizations beyond this sample would be unwarranted. However, a case could be made for nonstatistical generalization, given the geographical and institutional diversity of the sample.

Second, because all data came from the IDEA student ratings system the researcher had no influence on the nature or format of the questions posed to students. The research questions for this study were therefore limited to the response items used in the IDEA system. Additional questions related to other issues that might correlate with students' desire to take a course from a specific instructor will have to be addressed in future research.

Third, the study was conducted under the assumption that students respond honestly to ratings of instruction and that such ratings are valid and reliable. Much research has been conducted examining factors that influence students' ratings of instruction. These factors include, for example, gender of the instructor, class size, expected grade, academic field, course difficulty, course workload, type of institution (two year vs. four year), teaching experience, and reasons for taking a course (required vs. non-required) (Centra, 2003). This study does not propose to argue for or against the validity or reliability of student ratings. However, evidence is provided in Chapter 3 regarding the reliability and validity of IDEA student ratings of instruction. Nonetheless, the researcher recognizes that conclusions and generalizations made

from evidence collected from any measurement instrument are limited by that instrument's psychometric properties.

Fourth, because students responded to all questions at the same point in time, all relationships hypothesized in this study are correlational. No attempt is made to posit cause-effect relationships between instructor behaviors, course characteristics, course requirements and students' desire to take a course.

Fifth, information was not available about what point in time during the course the instructor administered the IDEA instrument. Therefore, the study provides no information about how variance in administration date might have affected the results.

Finally, students who completed the IDEA instrument most likely completed their respective course. Therefore, this study most likely provides no information about students who dropped out of the course prior to completing the instrument.

## CHAPTER 2

### REVIEW OF THE LITERATURE

#### INTRODUCTION

This study investigates course and instructional characteristics that correlate with a students' desire to take a course. More specifically, college students' average course ratings of the instructor's teaching methods and the course characteristics and requirements were examined as possible correlates of the desire to take a course from a specific instructor. Several elements of the literature regarding student motivation and student ratings are relevant to provide a context for this study. They are (a) issues related to student course selection; (b) technologies used in course delivery, (c) the effects of various teaching methods on students' learning and motivation (collaborative learning, establishing rapport, student involvement, course structure and using a variety of assessment methods; (d) the effects of assigning students' responsibility for their learning; and (e) student workload issues.

#### *Course Selection*

According to Babad and Tayeb (2003), colleges and universities invest great efforts and resources in guiding students through the course selection process to help them reach optimal decisions about their specific course choices. The authors concluded students' make "sloppy and non-systematic" course selections, in part because institutions do not provide students with appropriate information regarding which courses to select (Babad & Tayeb, 2003, p. 374). Students are required to make a series of course selection decisions that can either widen or limit their future educational opportunities (Babad, Darley, & Kaplowitz, 1999). The course selections they make create a chain of reactions that influence future course choices, skill development, and job decisions (Babad, 2001). Students choose subjects or activities for which they hold high



expectations, because they anticipate positive self-evaluation as the result of working hard on a subject or activity (Dickhauser, Reuter, & Hilling, 2005; Atkinson, 1964). Their persistence, and subsequent achievement, depends among other things on students' expectations of success concerning a subject or an activity (Wigfield & Eccles, 2002). In selecting a course, Babad and Tayeb (2003) mentioned two issues students should consider: "(1) Academic considerations, focused on course and instructor characteristics; and (2) personal/contextual considerations of the selecting student" (p. 375). The focus of this study is course and instructor characteristics that are correlated with a student's desire to select a course from a specific instructor. However, the current author acknowledges that personal/contextual considerations of the student are also essential correlates of the desire to take a course.

For example, some evidence exists that opportunities for certain careers influence students' choices of courses. Malgwi, Howe, and Burnaby (2005) examined why students select particular courses and majors and which positive and negative factors relate to any later changes in those course or major choices. Malgwi et al. used a questionnaire to collect data on factors that influence students' major selections. The 788 students who responded to their survey were (a) incoming freshmen and (b) students who had changed majors. The results showed students were mostly influenced by the major's potential for career advancement, job opportunities, and level of compensation in the field. The results also showed that the interest in the subject was the most important factor for incoming freshmen. Similarly, in a sample of 400 undergraduate students, McGoldrick and Schuhmann (2002) found that college students' choice of elective courses was in large part a function of their perceived interest in the course topic and the applicability of course material to future career opportunities. Again, however, the issues of career/job opportunities and future compensation are not the focus of this study. This study investigates

course and instructor characteristics that are correlated with a student's desire to take a course from a specific instructor.

### *Technologies Used in Course Delivery*

During the past decade, the quantity and diversity of computer technologies in education have increased dramatically (Hancock, Bray, & Nason, 2002). In higher education, students struggle to stay abreast of the latest computer hardware capabilities and software applications (2002).

The use of PowerPoint presentations has contributed substantially to the development of technologies used in course delivery. Instructors throughout the world rely on PowerPoint for many of their presentations (James, Burke, & Hutchins, 2006). PowerPoint is loaded on approximately 400 million computers worldwide, accounts for over 4 million lectures on the Web, and helps generate more than 30 million presentations per day (James, Burke, & Hutchins, 2006; Hanft, 2003; Harden, 2003). Instructors who have mastered PowerPoint, however, could just as easily learn to create simple pieces of interactive multimedia that encourage student participation in learning tasks and that appeal to multiple intelligences and learning preferences (Schrand, 2008).

James et al. (2006) examined whether significant differences exist between faculty and student perceptions with regard to PowerPoint's impact on perceived learning, classroom interactions, and student behaviors. The results indicated that (a) students have a significantly less favorable overall view of PowerPoint's influence on cognitive learning and classroom interaction than do faculty members; (b) unlike faculty members, students do not believe that posting notes on the web will decrease their motivation to attend class; and (c) both faculty members and students believe PowerPoint has a favorable impact on note-taking quality, content

recall during exams, emphasis on key lecture points, and holding student attention during class (2006).

Park and Lim (2007) explored the effects of different types of visual illustrations on learning interest, achievement, and motivation in multimedia learning. In the study, participants were drawn from two classes of “Introduction to Educational Technology” and randomly assigned to one of the three conditions: (a) cognitive-interest illustration condition, (b) emotional-interest illustration condition, and (c) text-only condition. The cognitive-interest illustrations were designed to promote learners’ cognitive interests by showing a scientific principle with corresponding illustrations. The emotional interest condition was created to enhance the learners’ emotional interests by presenting interesting peripherally relevant illustrations. The text-only condition presented text information only with no illustrations. The sample size was 36 (4 male, 32 female) undergraduate students divided into three groups (cognitive interest, emotional interest, and text-only). Following the experimental manipulation, the learners in the emotional-interest illustration condition and the cognitive-interest illustration condition scored significantly higher on motivation than the text-only condition. There was no difference between the emotional-interest illustration condition and cognitive-interest illustration condition. Motivation was measured by attention, relevance, confidence and satisfaction using Keller’s (1993) Instructional Material Motivation Survey (IMMS). The results indicated that both cognitive and emotional-interest illustrations are superior to text-only illustrations on college students’ motivational reactions toward the material presented.

These studies reveal that students and instructors believe PowerPoint technology has a favorable impact on note-taking quality, content recall during exams, emphasis on key lecture points, and holding students’ attention during class. Furthermore, media presentations with

cognitively and emotionally relevant illustrations can be motivating to students. Therefore, it is hypothesized that greater instructor use of technology will be positively correlated with students' desire to take a course from a specific instructor.

### *Stimulating Student Interest*

Educators and psychologists have long held that stimulating interest directs attention and enhances learning (Dewey, 1913; James, 1890; Thorndike, 1935). Students who are interested in a topic or task are more motivated, which affects how much they learn and how they feel about a course (Hidi & Harackiewicz, 2000; Hidi & Renninger, 2006). Students vary with respect to both *individual interest*, which comes from a history of involvement with an activity or topic, and *situational interest*, which is associated with a specific event that captures one's interest (Hidi, 1990). So, an instructor might stimulate student interest by connecting course content with topics or current events students find interesting, or by creating a stimulating activity in the classroom.

Stimulating student interest can lead to more focused, prolonged, and effortless attention (Krapp, Hidi, & Renninger, 1992; Schiefele, 1991). When college students have high interest in a topic, they comprehend more main ideas and make more inferences from text than do less interested students. In comparing narrative writing samples of middle-school and college students, Benton and colleagues (Benton, Corkill, Sharp, Downey, & Khramtsova, 1995) found that differences favoring college students at low levels of interest disappeared at higher levels of interest. In a related study, they (Albin, Benton, & Khramtsova, 1996) found that college students wrote more topic-relevant details on a high-interest topic than a low-interest topic.

According to Misra (1997) teaching stratification is used to stimulate interest and critical thinking skills. The author investigated the effects of critical thinking skills through the use of student research projects. Persell and Cookson (1993) define stratification as the social rankings,

issues of class, status, and power in classroom discussions. The projects were created to accomplish three goals: (1) focus on student engagement in the development of sociological research; (2) demonstrate the importance of class, race, and gender, and (3) explain these issues to the students. The results indicated by involving students in the research process they showed more attention in the projects, therefore, showing significant interest.

These studies revealed that stimulating student interest has a positive influence on students' academic performance. In this study, it is hypothesized that the frequency with which instructors stimulate interest will be positively correlated with students' desire to take a course from a specific instructor.

### *Collaborative Learning*

Johnson and Johnson (1999) define collaborative learning as group interactions that lead to a shared understanding, a deeper learning level, critical thinking skills, and long-term retention of the course material. Collaborative learning creates social and communication skills, positive attitudes towards class members and course material, and social rapport and group structure (Kreijns, Kirschner, & Jochems, 2003; Johnson & Johnson, 1999). Because of these potential benefits, the current study examined whether students' desire to take a course from a certain instructor is related to the extent to which the instructor fosters collaborative learning opportunities.

MacGregor (1991) noted that there have always been social dimensions to the learning process, but only recently have specially designed collaborative learning experiences been regarded as an innovative alternative to the lecture-centered and teacher-as-single authority approaches, typical of most university classrooms. Although collaborative learning is an effective method for encouraging dialogue, teaching and learning in this mode comes with high

expectations about student participation (Perumal, 2008). Given that collaboration requires substantial role shifts for students, it is not unusual to encounter student resistance to group work.

According to MacGregor (1991) students must make the following transitions when instructors require collaboration:

- from listener, observer, and note-taker to active problem-solver, contributor, and discussant;
- from low or moderate expectations of preparation for class to high expectations;
- from a private presence in the classroom (and few or no risks therein) to a public one, with many risks;
- from attendance dictated by personal choice to meeting community expectations;
- from competition with peers to collaborative work with them;
- from responsibilities and self-definition associated with learning independently to those associated with learning interdependently; and
- from seeing teachers and text as the sole sources of authority and knowledge, to seeing peers, oneself, and the thinking of the community as additional and important sources of authority and knowledge (pp. 2-3).

Some success has been achieved in helping students to become more comfortable with collaborative learning. Yazici (2004) examined how collaborative activities, ranging from exams to role playing, enhance the understanding of operative management. The sample size was 94 undergraduate students taking a required operations management class. Of these, 77 were seniors and 17 were juniors. A questionnaire was used to measure students' perceptions of their understanding of operations management, critical-thinking skills, and independent learning skills. A series of exercises (i.e., exams, projects, and role playing) increased students' comfort level in communicating and working with their peers and enhanced their independent learning skills. In addition, collaborative learning improved the students' understanding of quantitative operations management methods, developed their strategic thinking skills, and enhanced their confidence in their critical-thinking and implementation skills (2004).

Another study performed by Peterson and Schreiber (2006) provided a framework for examining personal and interpersonal motivation for collaborative projects. Participants were 211 (143 were female, 59 male, and 9 failed to indicate their gender) education majors enrolled in undergraduate or beginning graduate level Psychology classes. The students' were asked to read vignettes concerning student dyads engaged in collaborative projects. The vignettes described in the study were self-ability, partner ability, self-effort, and partner effort. Students were then asked to rate their preferences for how they would most like to learn. Based on the results, students' preferred working in a group setting compared to working individually.

This study investigated several collaborative teaching methods, including forming "teams" or "discussion groups" to facilitate learning, asking students to share ideas and experiences with others whose backgrounds and viewpoints differed from their own, and asking students to help each other understand ideas or concepts. Because of the shifts required in students' approaches to classes requiring substantial collaborative learning, no directional hypotheses are proposed in this study for the effects of collaborative learning techniques on students' desire to take a course. However, any relationships that are observed could be informative to educators.

### *Establishing Rapport*

The place of faculty members in higher education is expanding beyond the traditional boundaries. Teachers and professors, once seen as figures of specific expertise and authority whose roles were confined to classrooms, office hours, and laboratories, are now regarded as important potential players in the larger learning and living experience of the undergraduate student. Increasingly, instructors are in a position to connect with students during the broader educational experiences associated with campus and community living and learning (Armstrong,

1999; Aylor & Oppliger, 2003). Student affairs professionals are realizing the immense importance of faculty as multi-faceted, productive resources for improving the overall quality of undergraduate life and bridging the gap between curricular and co-curricular experiences (Armstrong, 1999). Today, substantive faculty-student connections are not exactly commonplace, but the potential for new and significant roles for faculty members in the undergraduate learning and living experiences is beginning to be valued and understood (1999).

According to Kuh (1996) out-of-class communication between instructors and students is a major component of the seamless learning environment. Seamless learning environments encourage students to view out-of-class and in-class experiences not as distinct learning opportunities, but rather as experiences that are intimately bound together. Students and instructors in seamless learning environments realize that educational opportunities exist inside and outside the classroom, and they attempt to maximize the interdependence between the two types of experiences. Out-of-class communication between students and instructors is one important resource for creating seamless learning environments (Kuh, Schuh, Whitt, & Associates, 1991; Aylor & Oppliger, 2003).

Historically, communication education researchers have been interested in interactions between instructors and students in classroom settings (Aylor & Oppliger, 2003). Although hundreds of studies have investigated in-class communication in higher education, few assess student-faculty interaction outside the classroom. Fusani (1994) explored students' and instructors' perceptions of "extra-classroom" communication. The sample size included 282 students (154 men and 128 women) enrolled in 13 different day classes at a community college. The results indicated 23% had neither visited nor informally chatted with the instructor, and 50% of respondents had experienced two or fewer contacts.



Aylor and Oppliger (2003) examined student perceptions of instructor humor-orientation, assertiveness, and responsiveness as antecedents of out-of-class communication between instructors and students. The sample size for this study consisted of 188 undergraduate students enrolled in sections of public speaking courses. The results indicated instructor-humor orientation significantly predicted formal and informal out-of-class communication frequency, whereas instructor responsiveness best predicted student satisfaction with out-of-class communication. Findings imply that instructors can increase the frequency of out-of-class communication with their students, especially informal out-of-class communication, by exhibiting humorous dispositions. By using a responsive manner, instructors can also promote student satisfaction with out-of-class communication.

The kinds of interactions faculty have with students can affect students' level of involvement in a course. For example, harsh or aggressive interactions can have negative effects. Edwards, Myers, Wahl, and Martin (2007) investigated the link between college students' perceptions of instructors' aggressive communication and students' involvement in and out of the classroom. Aggressive communication is referred to as a particular behavior of verbal aggression. The sample was comprised of 218 (70 men, 148 women) undergraduates enrolled in an introductory communication course; 19 were sophomores, 56 were juniors, 130 were seniors, and 6 were graduate students. Results indicated that students' reports of instructor argumentativeness were negatively correlated with their motives to communicate, ask questions, seek overt information, interact with others, or communicate out-of-class. Students' reports of instructor verbal aggressiveness were also negatively correlated with their desire to learn more about the course, their comprehension of course material, and their desire to establish an interpersonal relationship with their instructor.

Building a rapport with students might be especially important for first-generation college students. Estrella and McKay (2008) explored the quality of interaction between first-generation students and faculty members. The sample of 43 undergraduates was comprised of Latino-American (n = 21), Asian-American (n = 18), or European American (n = 4) sophomores (n = 22), juniors (n = 15), and seniors (n = 6). Results confirmed communication between faculty and first-generation students is important for student development. Specifically, students were asked to respond to an open-ended question assessing their views on the importance of interactions with faculty outside of the classroom. Qualitative analyses of students' responses indicated that communicating with the instructor and establishing a relationship with the instructor appear to be significant factors in helping first-generation students to achieve academic goals and to integrate socially. Furthermore, the quality of interaction with faculty is related to first-generation students' perceptions that they will accomplish short-term and long-term academic goals.

Jones (2008) examined how out-of-class support affects student satisfaction and motivation to learn. The sample size consisted of 594 students that were randomly assigned to experimental conditions manipulating a highly supportive, moderately supportive, or non-supportive teacher following a hypothetically stressful situation. The results indicated students reported greatest satisfaction and motivation to learn with highly supportive teachers, and less satisfaction and motivation with moderately and non-supportive teachers.

In this study, correlations were examined between students' desire to take a course and several teaching methods designed to enhance rapport: finding ways to help students answer their own questions, explaining the reasons for criticisms of students' academic performance, encouraging student-faculty interaction outside of class (office visits, phone calls, e-mails, etc.)

and displaying a personal interest in students and their learning. It is hypothesized that students will have a stronger desire to take a course from a specific instructor if students' ratings of these rapport-building strategies are also high.

### *Student Involvement*

Emphasizing student participation in a class can have a positive effect on student commitment to excellence and appreciation of other students' contributions to the learning experience. Astin (1984) defined student involvement as the amount of physical and psychological energy that a student devotes to the academic and social aspect of a campus (p. 134). Astin created a "theory of involvement" that highlights the relationship between student development and student involvement. Students are highly involved when they devote time to studying, spend a great deal of time on campus, participate actively in student organizations, and interact frequently with faculty and other students (Astin, 1999).

Flowers (2004) examined which student involvement experiences impacted educational outcomes for African Americans in college. The data sample consisted of 7,923 African American students (5,150 females and 2,773 males) from 193 higher education institutions that participated in the College Student Experience Questionnaire. The CSEQ requested information about students' demographic traits, student involvement experiences, and student intellectual and social gains (Flowers, 2004; Bauer, 1995; Decoster, 1989; Kuh & Hu, 2001; Kuh, Vesper, Connolly, & Pace, 1997; Pace, 1984). The types of in-class and out-of-class variables the CSEQ measured were: library experiences, experiences with faculty, course learning, art, music, and theater, personal experiences, student union, athletic and recreation facilities, clubs and organizations. The results indicated that in-class and out-of-class experiences positively impacted student development.

Weaver and Qi (2005) investigated factors that influence students' class involvement. The sample size consisted of 1,550 undergraduate and graduate students in an urban university setting. Four predictors were measured: class size, professor as the authority of knowledge, faculty-student interaction, and fear of professor's criticisms. The results indicated that faculty-student interactions (e.g. interaction outside the classroom, email communication, assisting the instructor in their research area, and discussing coursework) were the most important variable that influenced student participation within the classroom.

Koljatic and Kuh (2001) investigated common efforts instructors use to enhance student engagement in the classroom. They examined whether student engagement in three educational practices increased in the United States between 1983 and 1997. The practices were cooperation with peers, active learning, and faculty-staff relationships. The sample size consisted of 73,050 undergraduate students that completed the College Student Experiences Questionnaire from 1984 to 1989 and from 1990 to 1997. The results indicated the frequency of student engagement in good educational practices remained steady during the 15-year period.

In this study, several teaching methods designed to encourage student involvement are hypothesized to increase student desire to take a course: (a) encouraging students to use multiple resources (e.g., data banks, library holding, outside experts) to improve understanding; (b) involving students in "hands on" projects such as research, case studies, or "real life" activities; (c) giving projects, tests, or assignments that require original or creative thinking; and (d) relating course material to real-life situations.

### *Course Structure*

College instructors continue to search for methods or strategies that enhance students' learning in the classroom environment. According to Lyle and Young (2006), the main goal a

college instructor has for students is for them to engage with the course material at a level that leaves them with a significant understanding. Many factors come into play with regards to substantive engagement: students' personal factors, such as motivational beliefs and metacognitive strategies; as well as contextual factors, such as the instructional practices and course procedures around which a course is structured and implemented (2006). Hancock (2002) stated "creation of classroom conditions in which postsecondary students are motivated to learn academic material continues to be an elusive goal of educators in higher education" (p. 63). To establish the environment necessary for learning to take place, the teacher needs to create a positive social climate (Shapiro, 1993). Shapiro (1993) cited Schmuck and Schmuck (1975) in defining an effective classroom setting as one in which student's support each other and in which teachers encourage group learning and establish a supportive work environment.

Hancock (2002) investigated the interactive effects of professors' instructional strategies and students' conceptual levels on the motivation to learn. Participants were 83 postsecondary students randomly assigned to either direct or nondirect instruction groups. Statistically significant interactions revealed that highly structured teaching methods maximized the motivation of students with low conceptual level, whereas teaching methods that were low in structure enhanced the motivation of high-conceptual-level students. So the effectiveness of specific teaching methods may depend on the conceptual level of the students. However, because no personal information about students is contained in The IDEA Center data base, such interactions cannot be examined in the proposed study.

In this study, several strategies for structuring teaching methods were examined in terms of their relationship to students' desire to take a course: explaining the course material clearly and concisely; making it clear how each topic fits into the course; giving tests, projects, and so

forth that cover the most important points in the course; scheduling course work in ways which encourage students to stay up-to-date in their work; and providing timely and frequent feedback on tests and reports to help students improve. It is hypothesized that students' desire to take a course will be positively correlated with the frequency with which instructor applies these structured teaching methods.

#### *Using a Variety of Assessment Methods*

Another instructor characteristic that could affect students' desire to take a course from a specific instructor is whether or not the instructor uses a variety of assessment methods.

Research indicates that students hold strong views about different assessment formats (Struyven, Dochy, & Janssens, 2005). In addition, students' perceptions of assessment formats significantly influence their approaches to learning and studying (Struyven, Dochy, & Janssens, 2005). Maki (2004) defined assessment as a process that enables educators to determine the fit between what they expect students to understand and to be able to do, and what students actually demonstrate at points along their educational career.

One reason for varying assessment methods is that students express different preferences for different kinds of assessment. Birenbaum (1997), for example, investigated group differences in assessment preferences among students in two different academic fields by examining the relationships between assessment preferences and student learning orientations and strategies. The sample size consisted of 85 engineering and 87 education students in a university setting. The author examined six assessment preferences: higher-order thinking tasks, unconventional assessment, integrated assessment, student participation, oral exams, and teacher-guided test preparation. Both groups of students preferred the teacher-guided test preparation followed in order of preference by unconventional assessment, student participation, higher-order thinking

tasks, and integrated assessment. The results indicated differences in assessment preferences correlated with students' learning strategies.

Birenbaum and Feldman (1998) examined students' attitudes toward two types of assessments: open-ended and multiple-choice questions. The sample size consisted of 58 undergraduate students. The results revealed students held positive attitudes towards the open-ended questions and negative attitudes toward the multiple-choice questions. In addition, students with low test-anxiety scores had more positive attitudes toward open-ended questions.

Students in the proposed study were asked to what extent their instructor used a variety of assessment methods—not only tests—to assess their progress on relevant learning objectives. It is hypothesized that students' desire to take a course will be positively correlated with the instructor's use of a variety of teaching methods.

### *Student Responsibility*

Because colleges are learning communities, individuals accepted into those communities have certain privileges and responsibilities of membership (Davis & Murrell, 1993). Coffman (2003) identified 10 strategies instructors can use to get their students to take more responsibility for their learning. The 10 strategies are: (1) Ask students why they are taking the course. (2) Get students to come to class prepared. (3) Help students to attain the proper mindset for class. (4) Make participation and interaction integral parts of the course. (5) Make students responsible for each other. (6) Teach students to behave responsibly in groups. (7) Model higher cognitive skills. (8) Have students analyze their learning experiences. (9) End class in a meaningful way. (10) Allow students' to take responsibility for their learning.

Devlin (2002) examined first-year university students' perceptions of responsibility for their learning and their conceptions of learning. The sample size consisted of 100 students. The

results indicated that students viewed learning as their personal responsibility; however, Devlin (2002) concluded that their conception of learning (how one comprehends material) needed to shift in order for them to achieve lifelong learning.

This study correlated students' desire to take a course with their ratings of how much the instructor expected students to take responsibility for their own learning. Because the evidence is not solid regarding the effect of assigning students' greater responsibility on their desire to take a course, no directional hypotheses are proposed.

### *Student Workload*

Workload of students has probably been a concern for curriculum designers since formal education started (Kember & Leung, 1998). Kember (2004) defined course workload as a student's opinion of the quantity of work that a specific course requires for the semester (Kember, 2004). More specifically, workload is the "pressure placed on students in terms of demands of the syllabus and assessment tasks" (Entwistle & Ramsden, 1983, p. 124; Kember, 2004, p. 167). Centra added that workload is comprised of students' ratings of course difficulty, workload, and rate (speed) of the course.

Chambers (1992) argued student workload is a pre-condition of good studying and learning. For countless undergraduates, a significant factor influencing their focus in a course of study is the workload they are asked or expected to do (Chambers, 1992).

Greenwald and Gillmore (1997) assessed students' perceptions of evaluative ratings, expected grades, and course workloads. The samples of ratings came from approximately 200 undergraduate courses over three academic terms. The results established that instructors who gave higher grades were better liked, and instructors who gave the higher grades gave students lighter workloads. Furthermore, the findings also revealed that the instructors' grading leniency



is related to students' ratings. However, as Centra (2007) argued, student ratings are not biased if expected grades correlate positively with students' achievement of learning outcomes.

Centra (2003) investigated whether mean expected grades and the level of difficulty/workload in courses, as reported by students, overly influence student ratings of instruction. The sample was comprised of over 50,000 college courses whose teachers used the Student Instructional Report II. The author conducted regression analyses in eight subject areas, controlling for class size, teaching method, and student perceived learning outcomes in the course. Students' achievement of learning outcomes was strongly and positively correlated with students' evaluations of their instructor, as one would expect. Centra found that after controlling for students' achievement of learning outcomes, the grade students expected to earn generally did not affect student evaluations. The results indicated the courses that were considered difficult or too elementary had low student rating ratings, and the courses that were considered in between or "just right" were given the highest ratings.

In this study, three student ratings of course workload were correlated with students' desire to take a course from a specific instructor: amount of reading, amount of work in other (nonreading) assignments, and difficulty of subject matter. It is hypothesized that these workload variables will be negatively correlated with students' desire to take the course.

### Chapter Summary

This review confirmed the need for additional research on course and instructor characteristics related to students' desire to take a course. This chapter explored: (a) issues related to student course selection; (b) technologies used in course delivery; (c) the effects of various teaching methods on students' learning and motivation (collaborative learning, establishing rapport, student involvement, course structure and using a variety of assessment

methods); (d) the effects of assigning students' responsibility for their learning; and (e) student workload issues. Based on the literature reviewed in this chapter, the following research hypotheses are posited for the questions posed for this study.

### *Research Hypotheses*

Based on the literature reviewed in this chapter, the following research hypotheses are posited for the questions posed for this study:

1. Do college students' ratings of the frequency with which their instructor applies certain teaching methods correlate with students' desire to take a course from a specific instructor?

*Hypothesis 1.1:* As students' ratings of how frequently their instructor uses methods for stimulating student interest increase, students' desire to take a course from that instructor will increase.

*Hypothesis 1.2:* There will be a relationship between students' ratings of how frequently their instructor uses methods for fostering student collaboration and students' desire to take a course from that instructor.

*Hypothesis 1.3:* As students' ratings of how frequently their instructor uses methods for establishing rapport increase, students' desire to take a course from that instructor will increase.

*Hypothesis 1.4:* As students' ratings of how frequently their instructor uses methods for encouraging student involvement increase, students' desire to take a course from that instructor will increase.

*Hypothesis 1.5:* As students' ratings of how frequently their instructor uses methods for structuring the classroom increase, students' desire to take a course from that instructor will increase.

2. Are students' ratings of course characteristics related to students' desire to take a course from a specific instructor?

*Hypothesis 2.1:* As students' ratings of the extent to which the instructor uses a variety of assessment methods increase, students' desire to take the course will increase.

*Hypothesis 2.2:* There will be a relationship between students' ratings of the extent to which the instructor expects students to take their share of responsibility for learning, and students' desire to take a course from that instructor.

*Hypothesis 2.3:* As students' ratings of the extent to which the instructor uses educational technology (e.g., Internet, e-mail, computer exercises, multi-media presentations) increase, students' desire to take the course will increase.

3. Are student ratings of course requirements related to students' desire to take a course from a specific instructor?

*Hypothesis 3.1:* As students' perceptions of the difficulty of the subject matter increase, students' desire to take the course from that instructor will decrease.

*Hypothesis 3.2:* As students' perceptions of the amount of reading increases, students' desire to take a course from that instructor will decrease.

*Hypothesis 3.3:* As students' perceptions of the amount of work in other (nonreading) assignments increase, students' desire to take a course from that instructor will decrease.

## CHAPTER 3

### METHOD

#### INTRODUCTION

The purpose of this study is to investigate whether certain teaching methods, course circumstances, and course requirements correlate with college students' desire to take a course from a specific instructor. This chapter explains the methods that were used to analyze and interpret the archival data. Chapter 3 provides information concerning the participants, instrumentation, data sources or evidence, and reliability and validity of the instruments used.

##### *Participants*

From 2002 to 2007, 572,332 classes of university/college students participated in The IDEA Center Student Ratings system. The average enrollment in those classes was 22 students, with a class range of from 1 to 909 students. The vast majority of classes used the traditional paper-and-pencil response format (93.9%), whereas 6.1% used the online response format. Instructors were asked to respond to several questions regarding the nature of the class (i.e., type of student enrolled, primary and secondary approach to instruction, whether the course was team taught, and whether distance learning methods were employed).

Among faculty who responded, the greatest percentage of classes (27.2%) came from freshman/sophomores taking a course to meet a general education requirement or distribution requirement. This was followed by 24.0% of classes whose students were upper-level majors seeking competence or expertise in their academic/professional specialization. For 46.5% of classes, the primary approach to instruction was lecture. The most frequently identified secondary approach, representing 25.9% of respondents, was discussion/recitation. Only 5.7% of

the classes were team taught, and only 1.6% of instructors taught the class through distance learning.

Of those classes participating, 205,735 (35.9%) used The IDEA *Student Ratings Short Form*. Because the questions addressed in this study are limited to students who used the Diagnostic Form, cases responding to the Short Form were not included in the data set. In addition, if fewer than 10 students rated a specific instructor in a particular class, that instructor's entry was removed from the final sample. This amounts to 99,251 classes or an additional 17.3% of the cases being removed. Finally, if an entry was for a first-time user of IDEA student ratings, that entry was also removed. This group accounted for 83,329 or 14.6% of the cases. After applying these criteria, 184,017 classes remained in the final sample.

### *Instrumentation*

*Faculty Information Form (FIF)*. The FIF is designed to solicit information about the course from the instructor's perspective. Faculty may complete the FIF (see Appendix A) at any time during the course. They are asked to rate each of 12 learning objectives as either "Essential," "Important," or of "Minor or No Importance." They also indicate the week day(s) the class meets, the time the class meets, the course number, the number of students enrolled, a department discipline code, and—if appropriate—a local code within their institution. Faculty are also asked several contextual questions about the primary and secondary instructional approaches to the course (e.g., lecture, discussion/recitation, seminar); course requirements (e.g., writing, oral communication, group work); whether any of several factors may have had a positive negative, or neutral impact on students' learning (e.g., physical facilities, student enthusiasm to take the course, technical/instructional support); and finally the primary type of student enrolled (e.g., freshmen/sophomore meeting general education requirements,

upperclassmen non-majors, graduate or professional students). Instructors are also asked to indicate whether the course is team taught and whether it is taught through distance learning.

*Student Ratings Diagnostic Form.* The IDEA Center recommends that students complete the *Student Ratings Diagnostic Form* any time after the first half of the course is completed. It is also recommended that students not complete the ratings the last day of class. Students are asked to indicate how frequently their instructor uses each of 20 teaching methods (see Appendix A), using a scale of 1 = Hardly Ever, 2 = Occasionally, 3 = Sometimes, 4 = Frequently, and 5 = Almost Always. The 20 teaching methods are organized into five subscales presented in Table 1.

Table 1

*Teaching Method Subscales on the IDEA Student Ratings Diagnostic Form*

**Teaching Methods and Styles**

**Stimulating Student Interest**

4.Demonstrated the importance and significance of the subject matter
8. Stimulated students to intellectual effort beyond that required by most courses
13. Introduced stimulating ideas about the subject
15. Inspired students to set and achieve goals which really challenged them

**Fostering Student Collaboration**

5.Formed “teams” or “discussion groups” to facilitate learning
16. Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own
18. Asked students to help each other understand ideas or concepts

**Establishing Rapport**

1.Displayed a personal interest in students and their learning
2.Found ways to help students answer their own questions
7. Explained the reasons for criticisms of students’ academic performance
20. Encourage student-faculty interactions outside of class (office visits, phone calls, e-mail, etc.)

### **Encouraging Student Involvement**

9. Encouraged students to use multiple resources (e.g. data banks, library holdings, outside experts) to improve understanding
11. Related course material to real life situations
14. Involved students' in "hands-on" projects such as research, case studies, or "real-life" activities
19. Gave projects, tests, or assignments that required original or creative thinking

### **Structuring Classroom Experience**

3. Scheduled course work (class activities, test, and projects) in ways which encouraged students' to stay up-to-date in their work
6. Made it clear how each topic fit into the course
10. Explained course material clearly and concisely
12. Gave tests, projects, etc. that covered the most important points of the course
17. Provided timely and frequent feedback on tests, reports, projects, etc. to help students improve

Students indicate their progress on each of the same 12 learning objectives their instructor rated as either "Essential," "Important," or of "Minor or No Importance" on the FIF. Students rate their progress on each objective by indicating one of five possible responses: 1 = No apparent progress; 2 = Slight progress; I made small gains on this objective; 3 = Moderate progress; I made some gains on this objective; 4 = Substantial progress- I made large gains on this objective; and 5 = Exceptional progress; I made outstanding gains on this objective.

Students also respond to additional questions about the course that pertain to the relative amount of reading required, the relative amount of work in (non-reading) assignments, and the relative difficulty of the subject matter. They also respond to questions about their desire to take the course, their effort, and their attitude about the field of study as a result of taking the course. They also rate the overall quality of the teacher and the overall quality of the course. Finally,

students respond to additional questions regarding their typical effort in a class, the instructor's teaching methods and expectations, and to what extent the instructor used educational technology. There is also space provided for students to write in open-ended comments about the class and instructor. The open-ended responses are shared only with the instructor and are not retained in The IDEA Center data base.

#### *Data Sources or Evidence*

Archival data were obtained from files stored at The IDEA Center, Manhattan, Kansas.

#### *Reliability*

Hoyt and Lee (2002) performed several analyses on The IDEA student ratings data to examine the reliability of individual-item and scale scores. Table 2 presents the range of values for reliability estimates and standard errors of measurement for individual items. Courses that contained 13-17 respondents were used for computing split-half reliabilities for each of the 47 items and the five scales. The classes were randomly divided into two groups, and the means were computed and correlated using each half. The Spearman-Brown Prophecy Formula was used to estimate the reliabilities for class averages of 12.5, 24.5, 42.5, and 60 (which corresponded to class sizes of 10-14, 15-34, 35-49, and 50+). In addition, standard deviations were computed for each item and scale, along with reliability estimates, to calculate standard errors of measurement (SEM). Table 2 provides information about the likely ranges of reliability estimates and SEMs, depending on the class range size. The probability that the true mean falls within one standard error of the obtained mean is two out of three. In addition, 95 times out of 100 the measure will fall within two standard errors of the obtained mean. Table 3 presents the same information for the scale scores described previously.



Table 2

Item Reliabilities<sup>1</sup>: Split Half Reliabilities (Spearman-Brown Prophecy) and Standard Errors

Class Size	<u>Reliability</u>		<u>Standard Error</u>	
	Range	Average	Range	Average
10-14	.39-.90	.78	.21-.34	.27
15-34	.56-.94	.87	.16-.26	.21
35-49	.56-.95	.92	.13-.21	.16
50+	.76-.97	.94	.11-.18	.14

<sup>1</sup>Experimental items not included.

*Note.* Data summarized from Technical Report 12: Table 17 page 45.

Table 3

Scale Reliabilities and Inter-Correlations for IDEA Teaching Method Scales (Items 1-20:Diagnostic Form)

Scale	Coefficient Alpha	Inter-Correlations Range
Stimulating Student Interest	.94	.75-.86
Fostering Student Collaboration	.84	.64-.75
Establishing Rapport	.92	.70-.88
Encouraging Student Involvement	.85	.49-.69
Structuring Classroom Experiences	.93	.66-.86

*Note.* Data summarized from Technical Report 12: Table 18 page 46 and Table 6 pages 8-9.

Validity

Hoyt and Lee (2002) took four approaches to verifying the validity of the student ratings. The first approach correlated student progress ratings on objectives with instructor ratings of importance on those same objectives. This approach is based on three assumptions: (1) instruction is effective; (2) instructors make meaningful and thorough judgments when they rate

the importance of each objective; and (3) students make conscientious ratings on these objectives. If these assumptions are true, then students' achievement of learning objectives should be significantly correlated with the instructor's rating of importance on the same objectives. In fact, the average correlation between instructor ratings of importance and students' self-reported ratings of progress is .265 on corresponding objectives. In contrast, the average correlation between instructors' ratings of importance and student' self-reported progress on the other 11 objectives is only .024. This finding provides evidence of the validity of students' self-reported ratings of progress on learning objectives.

A second approach to validity evidence concerns the consistency of student ratings with intuitive expectations about the frequency with which certain teaching methods are emphasized. In this approach, students' ratings of progress on learning objectives were correlated with the frequency with which instructors emphasized specific teaching methods. For example, the teaching method most highly correlated with progress on the learning objective of "Team skills" to improve understanding." These kinds of relationships consistently revealed that the frequency with which an instructor emphasizes a specific teaching method correlates positively with students' self-reported progress on an objective conceptually related to that method. This supports the validity of the students' ratings of the frequency with which instructors employ specific teaching methods.

Another source of validity evidence is found in students' rating of their desire to take the course and their desire to take the course regardless of who taught it. Table 4 presents results of differences in motivation ratings between the principle type of student enrolled in the class. In general, students give much higher desire ratings to courses that prepare them for a specific profession than they do for those aimed at general or liberal education. As the means in Table 4

indicate, students' ratings of the desire to take the course and the desire to take the course regardless of who taught it increase as students move from lower division, general education to graduate/professional status.

Table 4

*Motivation Ratings by Principle Type of Student Enrolled in the Class*

Type of Student	36. Strong desire to take this course		39. Wanted to take course regardless of who taught it	
	<u>Mean</u>	<u>s.d.</u>	<u>Mean</u>	<u>s.d.</u>
Lower Division, General Education	3.34	.65	3.11	.55
Upper Division, General Education	3.55	.61	3.21	.54
Lower Division, Specialized	3.86	.68	3.49	.55
Upper Division, Specialized	3.86	.60	3.44	.51
Graduate/Professional	3.92	.57	3.49	.49

Ratings were made on a 5-point scale where 1= low and 5=high

*Note.* Analyses reported in Table 21 used a more restricted data set. Classes with responses rates less than 75% or not reporting the number enrolled were also excluded.

Summary

The evidence presented in this chapter shows that the IDEA student ratings have good reliability and low SEMs. The validity evidence presented in this chapter indicates IDEA student ratings of teaching methods have good concurrent validity with what methods instructors report emphasizing in a course. In addition, students' motivation to take a course increases for courses that prepare them for a specific profession. The next chapter presents the results of the statistical analyses conducted to answer the research questions posed in Chapter 2.

## CHAPTER IV

### RESULTS

This chapter presents results of statistical analyses conducted to investigate some factors that are related to college students' desire to take a course from a specific instructor. The chapter is organized around the research questions and hypotheses proposed in the previous chapters.

The analyses began with computing descriptive statistics computed means and standard deviations on individual items and scale scores. Reliability estimates were then computed, along with intercorrelations, for all scale scores. To test Hypotheses 1.1 through 1.5, a series of multiple regression analyses were conducted to determine, in each case, which specific teaching methods best predict a student's desire to take a course from a specific instructor. To test Hypotheses 2.1 through 2.3, multiple regression analyses were used to determine which course characteristics best predict a student's desire to take a course from a specific instructor. To test Hypotheses 3.1 through 3.3, multiple regression analyses were used to determine which course requirements best predict a student's desire to take a course from a specific instructors.

#### *Descriptive Statistics for Relevant Items and Scale Scores*

Table 1 presents means and standard deviations for relevant items on the IDEA student ratings instrument. These indicate that, on average, instructors used the 20 teaching methods frequently.

#### *Descriptive Statistics for Relevant Items and Scale Scores on the IDEA Student Ratings*

Variable	<i>M</i>	<i>SD</i>
1. Item 1	4.42	.49
2. Item 2	4.22	.52
3. Item 3	4.30	.50
4. Item 4	4.40	.47
5. Item 5	3.67	.96

6. Item 6	4.30	.52
7. Item 7	3.98	.59
8. Item 8	4.05	.58
9. Item 9	3.97	.66
10. Item 10	4.23	.60
11. Item 11	4.30	.58
12. Item 12	4.35	.50
13. Item 13	4.17	.58
14. Item 14	3.93	.79
15. Item 15	3.96	.63
16. Item 16	3.87	.77
17. Item 17	4.23	.60
18. Item 18	3.96	.64
19. Item 19	4.07	.64
20. Item 20	4.07	.62
21. Item 33	3.22	.74
22. Item 34	3.48	.58
23. Item 35	3.46	.58
24. Item 38	3.55	.71
25. Item 44	3.93	.59
26. Item 45	4.34	.36
27. Item 47	3.95	.71
28. Scale SSI	4.14	.52
29. Scale FSC	3.83	.71
30. Scale ER	4.17	.50
31. Scale ESI	4.07	.57
32. Scale SCE	4.28	.48

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*Note.* The scale for Items 1 to 20 was 1= Hardly Ever, 2= Occasionally, 3=Sometimes,

4=Frequently, 5=Almost Always. The scale for Items 33 to 35 was 1= Much less than most courses, 2=Less than most courses, 3=About average, 4= More than most courses, and 5=Much

more than most courses. The scale for Item 38 was 1=Definitely false, 2= More false than true, 3= In between, 4= More true than false, and 5= Definitely true. The scale for Items 44 to 47 was 1=Definitely false, 2=More false than true, 3= In between, 4= More true than false, and 5=Definitely true. SSI=Stimulating Student Interest, FSC=Fostering Student Collaboration, ER=Establishing Rapport, and SCE=Structuring Classroom Experience.

Table 2

*Cronbach Alpha Internal Consistency Coefficients for IDEA Subscales*

Scale	# of Items	Cronbach's Alpha
Stimulating student interest	4	.94
Fostering collaboration	3	.87
Establishing rapport	5	.92
Encouraging student involvement	4	.88
Structuring classroom experience	5	.93

*Research Question 1: Do college students' ratings of the frequency with which their instructor applies certain teaching methods correlate with students' desire to take a course from a specific instructor?*

Stepwise multiple regression analyses, using backward elimination, were applied to test all hypotheses related to Research Question 1. This method was selected because it is well suited for exploratory model building and because there was no theoretical justification for ordering explanatory variables by their importance. The backward elimination procedure begins with all explanatory variables entered simultaneously into a full model, and then variables that do not make a statistically significant contribution to the model are removed one by one. Fields (2005)

suggest using the backward method when suppressor effects are present, which occurs when one explanatory variable has a significant effect when another variable is held constant. For each model several statistics were calculated: standardized residuals and Cook's distance statistics to identify potential outliers, and tolerance and variance inflation factors (VIF) to assess multicollinearity. Cases having Cook's distance values greater than 1 were considered to overly influence the model's ability to predict all cases; tolerance values greater than 10 and VIF values less than .1 were considered indicative of substantial multicollinearity. Unless mentioned, the reader can assume values for each model did not exceed these criteria.

*Hypothesis 1.1: As students' ratings of how frequently their instructor used methods for stimulating student interest increase, students' desire to take a course from the specific instructor will increase.*

To test whether stimulating student interest is related to students' desire to take a course from this instructor, the following explanatory variables were entered into a backward elimination regression analysis with Item 38 "I really wanted to take a course from this instructor," as the criterion variable: Item 4, "Demonstrated the importance and significance of the subject matter", Item 8, "Stimulated students to intellectual effort beyond that required by most courses", Item 13, "Introduced stimulating ideas about the subject", and Item 15, "Inspired students to set and achieve goals which really challenged them." As indicated in Table 1, all four explanatory variables had positive correlations with Item 38. So, students had a stronger desire to take the course if they believed their instructor practiced methods designed to stimulate student interest.

Table 1

*Descriptive Statistics for Variables in Model 1*

Variable	<i>M</i>	<i>SD</i>	2	3	4	5
1. Item 38	3.53	.72	.66	.68	.70	.70
2. Item 4	4.40	.49		.79	.86	.78
3. Item 8	4.03	.59			.82	.85
4. Item 13	4.15	.60				.82
5. Item 15	3.94	.64				

*Note.* All correlations significant at the  $p < .001$  level.

The full model with all variables entered simultaneously was significant,  $F(4, 366592) = 109,013.29$ ,  $p < .001$ ,  $R^2 = .543$ , indicating the set of four methods designed to stimulate student interest explained approximately 54% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all four contributed significantly to the model.

The standardized beta coefficients and semi-partial correlations in Table 2 reveal which variables had the strongest relationship with the criterion variable. Item 15 ( $\beta = .277$ ), "Inspired students to set and achieve goals which really challenged them," and Item 13 ( $\beta = .262$ ) "Introduced stimulating ideas about the subject," had the strongest relationships. Students who perceived that their instructor challenged them and presented stimulating ideas therefore had a stronger desire to take the course.



Table 2

*Inferential Statistics for Variables in Model 1*

Variable	$\beta$	$t$	$p$	Semi-partial $r$
1. Item 4	.096	41.71	.001	.05
2. Item 8	.153	64.65	.001	.07
3. Item 13	.262	102.17	.001	.11
4. Item 15	.277	118.65	.001	.13

*Note.* All correlations significant at the  $p < .001$  level.

*Hypothesis 1.2: There will be a relationship between students' ratings of how frequently their instructor used methods for fostering student collaboration, and students' desire to take a course from the specific instructor.*

To test whether fostering student collaboration is related to students' desire to take a course from this instructor, the following explanatory variables were entered into a backward elimination regression analysis, with Item 38 as the criterion variable: Item 5, "Formed teams or discussion groups to facilitate learning", Item 16, "Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own," and Item 18, "Asked students to help each other understand ideas or concepts." As indicated in Table 3, all three explanatory variables had positive correlations with Item 38. Consequently, students had a stronger desire to take the course if they believed the instructor practiced methods designed to foster student collaboration.

Table 3

*Descriptive Statistics for Variables in Model 2*

Variable	<i>M</i>	<i>SD</i>	2	3	4
1. Item 38	3.53	.72	.37	.53	.60
2. Item 5	3.66	.98		.66	.72
3. Item 16	3.85	.79			.78
4. Item 18	3.94	.66			

*Note.* All correlations significant at the  $p < .001$  level.

The full model with all variables entered simultaneously was significant,  $F(3, 366593) = 76,256.75$ ,  $p < .001$ ,  $R^2 = .384$ , indicating the set of four methods designed to foster student collaboration explained approximately 38% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all three contributed significantly to the model.

The standardized beta coefficients and semi-partial correlations in Table 4 can be used to interpret which variables had the strongest relationship with the criterion variable. Item 18 ( $\beta = .564$ ), "Asked students to help each other understand ideas or concepts," had the strongest relationship with the criterion variable. Students, therefore, had a stronger desire to take the course if their instructor asked them to help each other understand course ideas and concepts.

Notably, the beta coefficient and semi-partial  $r$  for Item 5 (Formed "teams" or "discussion groups" to facilitate learning) are negative, even though the zero-order correlation between Item 5 and the criterion variable was relatively weak but positive. Item 5 is therefore a suppressor variable that most likely helps to explain error variance in Items 16 and 18, by virtue of its high correlation with these variables. One might expect that the frequency with which instructors ask students to share ideas (Item 16) and ask students to help each other (Item 18) depends on how frequently they form teams or discussion groups (Item 5). When they do form

teams or discussion groups, they are probably more likely to ask students to share ideas and help each other, thereby enhancing students' desire to take the course.

Table 4

*Inferential Statistics for Variables in Model 2*

Variable	$\beta$	$t$	$p$	<i>Semi-partial r</i>
1. Item 5	-.167	-87.32	.001	-.11
2. Item 16	.202	95.84	.001	.12
3. Item 18	.564	247.00	.001	.32

*Note.* All correlations significant at the  $p < .001$  level.

*Hypothesis 1.3: As students' ratings of how frequently their instructor used methods for establishing rapport increase, students' desire to take a course from the specific instructor will increase.*

To test whether establishing rapport is related to students' desire to take a course from the specific instructor, the following explanatory variables were entered into a backward elimination regression analysis, with Item 38 as the criterion variable: Item 1, "Displayed a personal interest in students and their learning," Item 2, "Found ways to help students answer their own questions," Item 7, "Explained the reasons for criticisms of students' academic performance," and Item 20, "Encouraged student-faculty interaction outside of class (office visits, phone calls, e-mail, etc.). As indicated in Table 5, all explanatory variables had positive correlations with Item 38. Therefore, students had a stronger desire to take the course if they believed the instructor established rapport within the classroom.

Table 5

*Descriptive Statistics for Variables in Model 3*

Variable	<i>M</i>	<i>SD</i>	2	3	4	5
1. Item 38	3.53	.72	.67	.70	.66	.63
2. Item 1	4.42	.51		.89	.77	.76
3. Item 2	4.21	.54			.80	.74
4. Item 7	3.96	.61				.71
5. Item 20	4.05	.63				

*Note.* All correlations significant at the  $p < .001$  level.

The full model with all variables entered simultaneously was significant  $F(4, 366592) = 103,423.85$ ,  $p < .001$ ,  $R^2 = .530$ . The set of four methods designed to establish rapport therefore explained approximately 53% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all four contributed significantly to the model.

The standardized beta coefficients and semi-partial correlations in Table 6 reveal which variables had the strongest relationship with the criterion variable. Item 2, "Found ways to help students answer their own questions ( $\beta = .305$ ), Item 7 ( $\beta = .200$ ), "Explained the reasons for criticisms of students' academic performance," and Item 20 ( $\beta = .178$ ) "Encouraged student-faculty interaction outside of class," had the strongest relationships with criterion variable. So, students had a stronger desire to take the course if they believed the instructor found ways to help them answer their own questions, explained reasons for criticisms, and encouraged interactions outside of class.

Table 6

*Inferential Statistics for Variables in Model 3*

Variable	$\beta$	$t$	$p$	Semi-partial $r$
1. Item 1	.111	42.64	.001	.05
2. Item 2	.305	-114.82	.001	.13
3. Item 7	.200	100.75	.001	.11
4. Item 20	.178	97.50	.001	.11

*Note.* All correlations significant at the  $p < .001$  level.

*Hypothesis 1.4: As student ratings of how frequently their instructor used methods for encouraging student involvement increase, students' desire to take a course from the specific instructor will increase.*

To test whether encouraging student involvement is related to students' desire to take a course from this instructor, the following explanatory variables were entered using a backward elimination regression analysis, with Item 38 as the criterion variable: Item 9, "Encouraged students to use multiple resources (e.g. data banks, library holdings, outside experts) to improve understanding," Item 11, "Related course material to real life situations," Item 14, "Involved students in "hands on" projects such as research, case studies, or "real life" activities," and Item 19, "Gave projects, tests, or assignments that required original or creative thinking." Table 7 indicates that all four explanatory variables had positive correlations with Item 38. Students' desire to take a course from the instructor therefore increased if they perceived the instructor practiced methods that encouraged student involvement.

Table 7

*Descriptive Statistics for Variables in Model 4*

Variable	<i>M</i>	<i>SD</i>	2	3	4	5
1. Item 38	3.53	.72	.51	.58	.50	.55
2. Item 9	3.95	.68		.58	.70	.73
3. Item 11	4.30	.60			.60	.58
4. Item 14	3.91	.81				.73
5. Item 19	4.05	.66				

*Note.* All correlations significant at the  $p < .001$  level.

The full model with all variables entered simultaneously was significant  $F(4, 366592) = 62,891.85$ ,  $p < .001$ ,  $R^2 = .407$ , indicating the set of four methods designed to encourage student involvement explained 41% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all four contributed significantly to the model.

The standardized beta coefficients and semi-partial correlations in Table 8 indicated Item 19, "Gave projects, tests, or assignments that required original or creative thinking," and Item 11, "Related course material to real life situations," had the strongest relationships with the criterion variable. So, students who perceived that the instructor required original or creative thinking and related course material to real life situations had a stronger desire to take the course.

Table 8

*Inferential Statistics for Variables in Model 4*

Variable	$\beta$	$t$	$p$	Semi-partial $r$
1. Item 9	.101	50.25	.001	.06
2. Item 11	.355	211.39	.001	.27
3. Item 14	.051	24.94	.001	.03
4. Item 19	.228	108.32	.001	.14

*Note.* All correlations significant at the  $p < .001$  level.

*Hypothesis 1.5: As students' ratings how frequently their instructor used methods for structuring the classroom increase, students' desire to take a course from the specific instructor will increase.*

To test whether structuring classroom experience is related to students' desire to take a course from this instructor, the following explanatory variables were entered into a backward elimination regression analysis, with Item 38 as the criterion variable: Item 3, "Scheduled course work (class activities, tests, projects) in ways which encouraged students to stay up-to-date in their work," Item 6, "Made it clear how each topic fit into the course," Item 10, "Explained course material clearly and concisely," Item 12, "Gave tests, projects, etc. that covered the most important points of the course," and Item 17, "Provided timely and frequent feedback on tests, reports, projects, etc. to help students improve." As indicated in Table 9, all explanatory variables had positive correlations with Item 38. Therefore, students' had a stronger desire to take the course if they believed the instructor practiced methods designed to structure classroom experiences.

Table 9

*Descriptive Statistics for Variables in Model 5*

Variable	<i>M</i>	<i>SD</i>	2	3	4	5	6
1. Item 38	3.53	.72	.57	.67	.65	.52	.51
2. Item 3	4.29	.51		.77	.77	.75	.71
3. Item 6	4.29	.54			.87	.74	.68
4. Item 10	4.22	.62				.73	.72
5. Item 12	4.33	.52					.70
6. Item 17	4.22	.61					

*Note.* All correlations significant at the  $p < .001$  level.

The full model with all variables entered simultaneously was significant,  $F(5, 366591) = 64,670.65$ ,  $p < .001$ ,  $R^2 = .469$ , indicating the set of four methods designed to structure the classroom experience explained approximately 47% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all five contributed significantly to the model.

The standardized beta coefficient and semi-partial correlations in Table 10 reveal which variables had the strongest relationship with the criterion variable. Item 6 ( $\beta = .429$ ) "Made it clear how each topic fit into the course," and Item 10 ( $\beta = .422$ ) "Explained course material clearly and concisely," had the strongest relationships with the criterion variable. Therefore, students had a stronger desire to take the course if they perceived that the instructor indicated how each course topic was relevant and explained material clearly and concisely.

The beta coefficient and semi-partial  $r$  for Item 12 (Gave tests, projects, etc. that covered the most important points of the course) were negative, even though the zero-order correlation between Item 12 and the criterion variable was positive. Item 12 is therefore a suppressor variable that most likely helps to explain error variance in one of more of Items 3, 6, 10, or 17,



by virtue of its high correlations with these variables. It is possible that the frequency with which instructors encourage students to stay up to date with course work (Item 3) and provide timely and frequent feedback (Item 17), for example, depends on how frequently they give tests or projects (Item 12). When they give tests and projects frequently, they are probably more likely to keep students up to date and provide feedback, thereby enhancing students' desire to take the course.

Table 10

*Inferential Statistics for Variables in Model 5*

Variable	$\beta$	$t$	$p$	Semi-partial $r$
1. Item 3	.087	39.79	.001	.05
2. Item 6	.384	-148.53	.001	.18
3. Item 10	.270	102.43	.001	.12
4. Item 12	-.052	-25.21	.001	-.03
5. Item 17	.028	14.39	.001	.02

*Note.* All correlations significant at the  $p < .001$  level.

*Additional Research Question*

After examining the results of the hypotheses related to Research Question 1, the researcher decided to answer another question: Which of the five teaching method scales is most important in explaining students' desire to take a course from a specific instructor? To investigate this question, item means for each of the five a priori scales described in Chapter 2 were combined into a scale and then mean scale scores were computed. Descriptive statistics for those scales are presented in Table 11.

To test which teaching method is most important in explaining students' desire to take a course from a specific instructor, a backward elimination regression with Item 38 as the criterion

variable was conducted. The five a priori scales (Stimulating Student Interest, Fostering Student Collaboration, Establishing Rapport, Encouraging Student Involvement, and Structuring Classroom Experience) described in Chapter 2 served as explanatory variables. As indicated in Table 11, all five explanatory variables had positive correlations with Item 38. So, students had a stronger desire to take a course if they believed their instructor practiced all five teaching methods.

Table 11

*Descriptive Statistics for Variables in Model 6*

Variable	<i>M</i>	<i>SD</i>	2	3	4	5	6
1. Item 38	3.53	.72	.73	.59	.72	.61	.65
2. Scale SSI	4.13	.54		.78	.91	.84	.87
3. Scale FSC	3.96	.63			.78	.82	.71
4. Scale ER	4.15	.52				.79	.86
5. Scale ESI	4.05	.59					.73
6. Scale SCE	4.27	.50					

*Note.* All correlations significant at the  $p < .001$  level.

The five scales were then entered into a multiple regression analysis (using the backward elimination procedure) with Item 38 as the criterion variable. Table 12 presents the results of this analysis.

The full model with all scales entered simultaneously was significant,  $F(5, 366591) = 93,607.79$ ,  $p < .001$ ,  $R^2 = .561$ , indicating the set of five a priori teaching method scales explained approximately 56% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all five teaching methods contributed significantly to the model.

The standardized beta coefficients and semi-partial correlations in Table 12 reveal which scales had the strongest relationship with the criterion variable. Scale SSI (Stimulating Student Interest) ( $\beta = .514$ ) and Scale ER (Establishing Rapport) ( $\beta = .363$ ) had the strongest relationships with the criterion variable. Therefore, students had a stronger desire to take a course if they perceived that the instructor stimulated student interest and established rapport.

The beta coefficients and semi-partial  $r$ s for FSC, ESI, and SCE scales were negative, even though their zero-order correlations with the criterion variable were positive. These scales were therefore suppressors that most likely help to explain error variance in the SSI or ER scales. Perhaps the frequency with which instructors stimulate student interest and establish rapport, for example, depends on how frequently they foster student collaboration, encourage student involvement, and structure classroom experiences. When they do these things, they are probably more likely to stimulate student interest and establish rapport, thereby enhancing students' desire to take the course.

Table 12

*Inferential Statistics for Variables in Model 6*

Variable	$\beta$	$t$	$p$	Semi-partial $r$
1. Scale SSI	.514	152.21	.001	.17
2. Scale FSC	-.008	-3.693	.001	-.004
3. Scale ER	.363	123.19	.001	.13
4. Scale ESI	-.056	-23.85	.001	-.03
5. Scale SCE	-.064	-26.47	.001	-.03

*Note.* All correlations significant at the  $p < .001$  level.

*Research Question 2: Are students' ratings of course characteristics related to students' desire to take a course from a specific instructor?*

Three hypotheses were proposed for Research Question 2:

*Hypothesis 2.1:* As students' ratings of the extent to which the instructor uses a variety of assessment methods increase, students' desire to take a course from the specific instructor will increase.

*Hypothesis 2.2:* There will be a relationship between students' ratings of the extent to which the instructor expects students to take their share of responsibility for learning, and students' desire to take a course from the specific instructor.

*Hypothesis 2.3:* As students' ratings of the extent to which the instructor uses educational technology (e.g. Internet, e-mail, computer exercises, multi-media presentations) increase, students' desire to take a course from the specific instructor will increase.

To test whether course characteristics are related to students' desire to take a course from this instructor, the following explanatory variables were entered into a backward elimination regression analysis, with Item 38 as the criterion: Item 44, "Used a variety of methods to evaluate student progress," Item 45, "Expected students to take their share of responsibility for learning," and Item 47, "Used educational technology to promote learning." As indicated in Table 13, all three variables were positively correlated with Item 38.

Table 13

*Descriptive Statistics for Variables in Model 7*

Variable	<i>M</i>	<i>SD</i>	2	3	4
1. Item 38	3.53	.72	.53	.54	.35
2. Item 44	3.92	.61		.62	.41
3. Item 45	4.34	.38			.54
4. Item 47	3.92	.74			

*Note.* All correlations significant at the  $p < .001$  level.

The full model with all predictors entered simultaneously was significant,  $F(3, 366593) = 66,253.77, p < .001, R^2 = .352$ , indicating the set of three course characteristics explained approximately 35% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all three contributed significantly to the model. Examining the standardized beta coefficients in Table 13 reveals which variables had the strongest relationship with the criterion variable. Item 44 ( $\beta = .318$ ), "The instructor used a variety of methods—not only tests—to evaluate student progress on course objectives," and Item 45 ( $\beta = .308$ ) "The instructor expected students to take their share of responsibility for learning," had the strongest relationships.

Table 14

*Inferential Statistics for Variables in Model 7*

Variable	$\beta$	$t$	$p$	Semi-partial $r$
1. Item 44	.308	180.21	.001	.24
2. Item 45	.318	171.92	.001	.23
3. Item 47	.053	33.25	.001	.04

*Note.* All correlations significant at the  $p < .001$  level.

*Research Question 3: Are students' ratings of course requirements related to students' desire to take a course from a specific course instructor?*

Three hypotheses were proposed for this research question:

*Hypothesis 3.1:* As students' perceptions of the difficulty of the subject matter increase, students' desire to take a course from the specific instructor will decrease.

*Hypothesis 3.2:* As students' perceptions of the amount of reading increase, students' desire to take a course from the specific instructor will decrease.

*Hypothesis 3.3:* As students' perceptions of the amount of work in other (nonreading) assignments increase, students' desire to take a course from the specific instructor will decrease.

To test whether course requirements are related to students' desire to take a course from the specific instructor, the following variables were entered into a backward elimination regression analysis, with Item 38 as the criterion variable: Items 33, "Amount of reading", Item 34, "Amount of work in other (non-reading assignments," and Item 35, "Difficulty of subject matter". As indicated in Table 15, all three explanatory variables had low positive correlations. Therefore, as students' perceptions of the difficulty of the subject matter, the amount of reading, and the amount of work in other (nonreading) assignments increased, their desire to take a course from this instructor increased slightly.

Table 15

*Descriptive Statistics for Variables in Model 8*

Variable	<i>M</i>	<i>SD</i>	2	3	4
1. Item 38	3.53	.72	.09	.20	.17
2. Item 33	3.22	.75		.25	.42
3. Item 34	3.48	.59			.56
4. Item 35	3.46	.59			

*Note.* All correlations significant at the  $p < .001$  level.

The full model was significant,  $F(3, 366593) = 5833.27, p < .001, R^2 = .046$ , indicating the set of three course requirements explained approximately 46% of the variance in students' desire to take the course from this instructor. No variables were removed, which means all three contributed significantly to the model.

Examining the standardized beta coefficients in Table 16 reveals Item 34, "Amount of work in other (non-reading) assignments" had the strongest relationship with the criterion

variable. Therefore, as students' perceptions of the amount of work in non-reading assignments increased, their desire to take the course from the instructor increased. However, the magnitude of that relationship was not strong.

Table 16

*Inferential Statistics for Variables in Model 8*

Variable	$\beta$	$t$	$p$	<i>Semi-partial r</i>
1. Item 33	.017	9.59	.001	.02
2. Item 34	.159	81.56	.001	.13
3. Item 35	.070	33.59	.001	.05

*Note.* All correlations significant at the  $p < .001$  level.

### Chapter Summary

This chapter presented the results of the statistical analyses that were conducted to address the research questions and hypotheses. The major findings of the study are as follows:

1. Students reported a stronger desire to take a course from an instructor if he/she practiced methods designed to stimulate interest, foster student collaboration, establish rapport, encourage involvement, and provide structure.
2. Methods that stimulate student interest and established rapport had the strongest relationships with students' desire to take a course from a specific instructor.
3. Students reported a stronger desire to take a course from an instructor if he/she used a variety of assessment methods, used technology to promote learning, and expected students' to take their share of responsibility for learning.
4. As students' perceptions of the amount of work in non-reading assignments increased, their desire to take the course from the instructor increased slightly.

## CHAPTER V

### DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

#### **Purpose of the Study**

The purpose of this study was to examine some factors that are related to college students' desire to take a course from a specific instructor. Specifically, the study examined how students' ratings of the instructor's teaching methods, the course circumstances, and the course requirements correlated with students' desire to take a course from a specific instructor. The findings of this study provide higher education institutions with information about what motivates students to take a course and about which instructor behaviors are related to students' desire to take a course from that instructor. Moreover, the findings shed light on students' attitudes and reasons for selecting particular courses.

#### **Overview of the Methodology**

The data used in the study came from the archived data files of 184,017 classes at The IDEA Center. Data were collected from two instruments within the IDEA Student Ratings system: the *Faculty Information Form* (FIF), completed by the instructor, and the *Student Ratings Diagnostic Form*, completed by the students. The main source of data was gathered from the *Student Ratings Diagnostic Form*, Items 1-20 (focusing on how frequently their instructor used each of the 20 teaching methods), Item 33 (amount of reading), Item 34 (amount of work on nonreading assignments), Item 35 (difficulty of subject matter), Item 44 (instructor's use of variety of assessment methods), Item 45 (instructor expectations that students' take responsibility for learning), and Item 38 (students' desire to take a course from this instructor) as the criterion variable.



All analyses were performed using the statistical software package SPSS 16.0.

Descriptive statistics, correlational statistics, multiple regression analyses were used to test the research hypothesis.

### *Summary of Results*

The results of this study can be summarized as follows: First, students reported a stronger desire to take a course from an instructor if he/she practiced methods designed to stimulate interest, foster student collaboration, establish rapport, encourage involvement, and provide structure. Second, methods that stimulate student interest and establish rapport had the strongest relationships with students' desire to take a course from a specific instructor. Third, students reported a stronger desire to take a course from an instructor if she/he used a variety of assessment methods, used technology to promote learning, and expected students' to take their share of responsibility for learning. Fourth, as students' perceptions of the amount of work in non-reading assignments increased, their desire to take the course from the instructor increased slightly. In the section that follows, the findings regarding each research question are discussed along with implications for research and practice.

### **Discussion of the Research Questions**

*Research Question 1: Do college students' ratings of the frequency with which their instructor applies certain teaching methods correlate with students' desire to take a course from a specific instructor?*

In general, the more frequently instructors employed methods for stimulating interest, fostering collaboration, establishing rapport, encouraging involvement, and providing structure, the stronger was students' desire to take the course. Each of these methods is discussed individually in the following paragraphs.

*Question 1.1: Are students' ratings of how frequently their instructor used methods for stimulating student interest correlated with students' desire to take the course?* As instructors increase the frequency with which they apply methods for stimulating student interest, students report a stronger desire to take the course. The two methods most strongly related with student motivation to take the course were inspiring students to set and achieve goals which really challenged them and introducing stimulating ideas about the subject. Students who perceived that their instructor challenged them and presented stimulating ideas therefore had a stronger desire to take the course.

The results from this study relate to Hidi's (1990), work on individual interest, which comes from a history of involvement with an activity or topic, and situational interest, which is associated with a specific event that captures one's interest. In addition, Benton et al., (1995) found differences favoring college students at low levels of interest disappeared at higher levels of interest. In a similar study, they (Albin, Benton, Khramtsova, 1996) revealed college students wrote more topic-relevant details on high-interest topics than low-interest topics. As revealed by the data in this study, when an instructor presents stimulated ideas and challenges students, they have a strong desire to take the course.

*Question 1.2: Are students' ratings of the frequency of using methods for fostering student collaboration correlated with their desire to take the course?* When instructors increase the frequency of using methods of fostering student collaboration, students report a stronger desire to take the course. The method that had the strongest relationship was when instructors asked students to help each other understand ideas or concepts. Furthermore, students had a stronger desire to take the course if their instructor asked them to help each other understand course ideas and concepts.

These findings support the work of Yazici (2004) who found a range of activities including exams, projects, and role playing activities increased students' comfort level in communicating and working with their peers and enhanced independent learning skills. In a similar study, Peterson and Schreiber (2006) found students' preferred collaborative activities. The findings from this study indicate, that when instructors incorporate collaborative learning activities, students have a stronger desire to take the course.

*Questions 1.3: Are students' ratings of how frequently their instructor used methods for establishing rapport correlated with their desire to take the course?* As students' ratings of the frequency of using methods of establishing rapport increase, students' report a stronger desire to take the course. The three methods that established rapport were finding ways to help students answer their own questions, explaining the reasons for criticisms of students' academic performance, and encouraging student-faculty interactions outside of class. So, students had a stronger desire to take a course if they believed the instructor found ways to help them answer their own questions, explained reasons for criticisms, and encouraged interactions outside of class.

Students' in this study expressed similar beliefs to those of Aylor and Oppliger (2003), who noted a number of methods including humor orientation, assertiveness, and responsiveness increased efforts of establishing rapport between students and instructors. Specifically, Jones (2008) also found out-of-class support from the instructor increases student satisfaction and motivation to learn. The results from this study revealed students have a preference for instructors that use methods that establish rapport.

*Question 1.4: Are students' ratings of the frequency of using methods for encouraging student involvement correlated with their desire to take the course?* As students' ratings of the

frequency of using methods of student involvement increase, students' reported a strong desire to take a course. The two methods most strongly related with students' motivation to take the course were giving projects, tests, or assignments that required original or creative thinking and relating course material to real life situations.

In relation to the current study, Weaver and Qi (2005) indicated faculty-student interactions increased student involvement in the classroom. In a related study, Koljatic and Kuh (2001) uncovered when instructors use good educational practices, students' show a strong desire to choose the instructor. The results from this study revealed students' displayed a stronger desire to select an instructor who required original or creative thinking and related course material to real life situations.

*Question 1.5: Are students' ratings of the frequency of using methods for structuring the course experience correlated with their desire to take the course?* As instructors increase the frequency of using methods for structuring the course experience, students' reported a strong desire to take the course. The two methods most strongly related with students' motivation to take the course were made it clear how each topic fit into the course and explained course material clearly and concisely.

In relation to the current study, Hancock (2002) highly structured teaching methods maximized the motivation of students with low conceptual levels, whereas teaching methods that were low in structure enhanced the motivation of high-conceptual level students. The results indicated students had a strong desire to select an instructor who made it clear how each topic fit into the course and explained course material clearly and concisely.

*Additional Research Question*

*Which of the five teaching methods is most important in explaining students' desire to take a course from a specific instructor?* The most important teaching methods that showed the strongest desire to take a course were stimulating student interest and establishing rapport.

*Stimulating Student Interest* showed a significant relationship to the criterion variable. This method indicated students' selected instructors that demonstrated the importance and significance of the subject matter, stimulated students to intellectual effort beyond that required by most courses, introduced stimulating ideas about the subject, and inspired students to set and achieve goals which really challenged them.

*Establishing Rapport* also showed a significant relationship to the criterion variable. This method suggested students' selected instructors that displayed a personal interest, encouraged student-faculty interaction, explained the reasons for criticisms of students' academic performance and found ways to help students answer their own questions.

*Question 2: Are students' ratings of course characteristics related to students' desire to take a course from a specific instructor?* The more frequently instructors employed methods of assessment methods, take share of responsibility for learning, and using educational technology, the stronger was students' desire to take the course. Each method is discussed in the following paragraph.

*Question 2.1: Does the extent to which the instructor uses a variety of assessment methods correlate with desire? Question 2.2: Does the extent to which the instructor expects students to take their share of responsibility for learning correlate with desire? Question 2.3: Does the extent to which the instructor uses educational technology (e.g., Internet, e-mail, computer exercises, and multi-media presentations) correlate with desire?* As instructors increased the frequency of using variety of assessment methods, urged students to take their

share of responsibility for learning, and used educational technology, students' had a stronger desire to take the course. The two methods most strongly related with student motivation to take the course were the instructor used a variety of methods—not only tests—to evaluate student progress on course objectives and the instructor expected students to take their share of responsibility for learning.

Students in this study conveyed similar beliefs to those of Birenbaum and Feldman (1998) who noted students' held positive attitudes toward open-ended questions and negative attitudes toward multiple choice questions. In a similar study, Birenbaum (1997) indicated differences in assessment preferences correlated with students' learning strategies. Devlin (2002) revealed students viewed learning as their personal responsibility. The results from the students' in this study revealed they selected a course if the instructor displayed a variety of assessment methods and expected students' to take their share of responsibility for learning.

*Research Question 3: Are students' ratings of course requirements related to students' desire to take a course from a specific instructor?* In general, the more frequently instructors employed methods for stimulating interest, fostering collaboration, establishing rapport, encouraging involvement, and providing structure, the stronger was students' desire to take the course. Each of these methods is discussed individually in the following paragraphs.

*Question 3.1: Are students' perception of the difficulty of the subject matter correlated with their desire to take the course? Question 3.2: Are students' perceptions of the amount of reading correlated with desire? Question 3.3: Are student' perceptions of the amount of work in other (nonreading) assignments correlated with desire?* As students' perceptions of the difficulty of the subject matter, amount of reading, and amount of work increased, students' desire to take a course from the specific instructor increased slightly. The method most strongly related with

student motivation to take the course was amount of work in other (non-reading) assignments. Because the relationship was weak, the finding does not necessarily mean that instructors should increase non-reading assignments. Additional research is needed to determine the exact nature of this relationship.

Findings from this study relate to Greenwald and Gillmore (1997) who revealed instructors who gave higher grades were better liked, and instructors who gave the higher grades gave lighter workloads. In a related study, Centra (2003) indicated the courses that were considered difficult or too elementary had low student ratings, and the courses that were considered in between or “just right” were given the highest ratings. The results from this study revealed students’ selected a course if the instructor limited the amount of work.

#### *Implications for Research*

The following recommendations are made for future research:

1. A qualitative study should be conducted to gather information on the teaching methods used by online instructors and correlates of their students’ desire to take a course.
2. A qualitative study should be conducted examining the reasons why students choose specific instructors. This type of study should enrich the body of literature regarding instructor preference.
3. A study should be conducted examining the role advising plays in course selection. A study focused on advising would provide insight into how advisors could be more effective and would provide information to students pertaining to course selection.

4. Although gender, race, and age do not appear on the IDEA Student Ratings Diagnostics Form, a study should be conducted that focuses on students' gender, race, and age and course selection preferences.
5. In addition, a qualitative study could examine the students' past experiences and peer influences that are correlated with the desire to take a course.
6. A study should be conducted to examine the relationships between course selection preferences and student's grade point averages (GPA) to examine the differences between students with high or low G.P.A.'s.

#### *Recommendations for Practice*

*Recommendations for stimulating student interest.* Lee (2004) mentions several strategies that instructors can use to stimulate student interest in the classroom. Among these are learning the students' names and addressing them by name, being available to students' by posting office hours, encouraging forms of communication (e-mail, phone calls, etc.), responding to student feedback, establishing a positive relationship with the students, allowing opportunities for students to participate in classroom discussions, and integrating classroom material into the students' personal experience. These are just a few ways to help students feel a personal connection to the instructor.

Zakrajsek (2004) mentions several methods for inspiring students to set and achieve goals which really challenge them: (1) Demonstrate the importance of course material to the students, (2) have them participate in creating the syllabus on the first day of class, (3) make the students' take full responsibility for their work, and (4) create contracts for grades that allow students to stay focused on setting and achieving the goals of the course.



In addition, Palardy (1999) identified 15 strategies for motivating students: (1) Involve students in setting objectives. (2) Individualize objectives. (3) Set priorities in content. (4) Show students the relevance of what they are learning. (5) Help students learn to learn. (6) Make first experiences positive. (7) Introduce the unfamiliar through the familiar. (8) Appeal to students' interests and curiosity. (9) Program students for success. (10) Reward students for success. (11) Reward students for effort. (12) Model interest in learning. (13) Involve students actively in instruction. (14) Use a variety of teaching strategies. (15) Care, and be a friend.

McClure (2005) also mentions four suggestions that stimulate greater intellectual effort: (1) promote mastery learning, (2) create an open classroom that will allow students to respond openly, (3) give students' some options of selecting methods compatible with their learning style, and (4) set assignments that are beyond their potential, but well within their capability.

Finally, Theall (2004) mentions incorporating real-world problems, connecting with the students' backgrounds, and adding humor to the discussion as ways to stimulate ideas about the subject.

*Recommendations for fostering student collaboration.* Yazici (2004) proposed a series of exercises (exams, projects, and role playing) will increase students' comfort level in communicating with their peers. The findings suggested students' developed their strategic thinking skills and enhanced their confidence in their critical-thinking and implementation skills.

Zakrajsek (2005) refers to six principles that encourage team or discussion group learning: (1) create effective scenarios or ask relevant questions during group discussions, (2) establish clear and precise objectives with the discussion material, (3) monitor the progress of the discussion, (4) make the proper adjustments to the discussion if the groups are going in the right

direction or if they drift away from the subject, (5) ask questions to the groups to check progress, and (6) make them accountable for the information they retrieve.

King (2005) refers to instructors as the vocal point because they have to acknowledge their own beliefs, attitudes, and prejudices for success in this interaction. In addition, allowing a diverse response, allowing different viewpoints in the classroom, and encouraging group work allows student participation with others from various backgrounds.

King (2004) also discusses five planning tips to help students understand each other's ideas or concepts: (1) use a mixture of approaches (group activities, presentations, and class discussions) to promote peer learning; (2) provide a group charter for student groups to monitor tasks, keep up with deadlines, and update contact information; (3) during collaborative learning activities, allow the students to examine assessment points; (4) support the students by acting as a resource; and (5) celebrate students' creativity as they find new techniques, approaches, or teaching metaphors.

*Recommendations for establishing rapport.* Kuh (1996) suggested out-of-class communications between instructors and students create a seamless learning environment. In addition, Fusani (1994) recommends "extra-classroom" communications between the instructor and students will increase rapport. In conclusion, Aylor and Oppliger (2003) suggest instructors should install humor-orientation to out-of-class communication.

McClure (2004) suggests three methods to help students answer their own questions, which can help to establish rapport: (1) teach the students to ask questions for the information they are attempting to gather, (2) create an environment that encourages student responses during classroom discussions, and (3) implement strategies that promote active learning.

Walvoord (2005) provides seven strategies that explain the reasons for criticisms of students' academic performance: (1) indicate the number of major assignments to the students that the instructor will offer considerable feedback to the students, (2) give students a thorough, written set of grading criteria, (3) prepare students for tests and provide guidance early and during a major assignment, (4) use peer responses during the semester, (5) explain the significance of responding to a selected assignment and the purpose of the explanation, (6) differentiate the feedback on final papers and drafts, and (7) explain to the students that the main premise behind the instructor's feedback is to help the students' learn the material.

Pingree (2004) mentions six strategies for effective student faculty interactions outside of class: (1) Explain the borders of time and space, (2) help students understand these interactions are part of the job requirements, (3) know the students' learning styles and your teaching style, (4) utilize the most of office hours, (5) use technology to generate opportunities for communication, and (6) incorporate just-in-time teaching to endorse useful interactions outside of the classroom.

*Recommendations for encouraging student involvement.* Flowers (2004) suggests in-class and out-of-class activities increase students' involvement. Weaver and Qi (2005) recommended interaction outside the classroom, email communication, assisting the instructor in their research area, and discussing coursework as ways to influence student participation.

Baron (2005) provides six hints for encouraging students to use multiple resources: (1) Construct a course resource bank that contains viable information for the students to use during the semester, (2) use the problem-based learning approach that introduces students to a problem before preparing for the relevant material, (3) create resource expert teams to identify quality

resources for themselves or other classmates, (4) evaluate course material, and (5) conduct debates that raise different point of views during the classroom discussions.

Lee (2004) discusses six suggestions that will ease the transition to hands-on activities: (1) Begin small so the students can adjust to the transition, (2) stay persistent even if the first time does not work and try again, (3) explain the reasons for hands-on learning, (4) get perspectives from other colleagues, (5) revise or adjust for larger classes, and (6) use technology to make hands-on learning easier. Although this process takes time and patience, instructors using this method will increase students' participation in the classroom.

*Recommendations for structuring the classroom experience.* Theall (2005) refers to several ways to help students stay up-to-date in their work: Instructors should create an organizational structure that allows students to plan and complete coursework, break the work down into sections that will allow the students to carry out the assignments, create a syllabus that has clear and reachable objectives, and communicate with the students about how they will utilize their free time to accomplish the task of completing the work.

Theall (2004) also mentions three hints to put emphasis on previous topics before new material is discussed, (2) explain when transitions occur and clarify how and why topics fit, and (3) help students to not only review previous information but understand the structure of the way they learn the material.

Sorcinelli (2005) discusses six methods to explain course material clearly and concisely: (1) define the material students' are supposed to learn; (2) define new concepts and words, and explain foreign terms, (3) limit major points to a few a class; (4) use suitable examples to relate to the students' perspectives; and (5) explain key points so the students can understand the information that was presented during class.

Walvoord (2005) discusses three hints that assist the instructor in creating tests and projects that cover the most important points of the course: (1) Create a test or project that covers the most important goals of the course, (2) explain how the tests or projects will cover learning and assessment documented in the course syllabus, and (3) help the students conceptualize the elements mentioned in the course syllabus.

### *Conclusion*

Instructors play an important role in students' decision regarding course selection. Although students commonly look to their peers instead of academic advisors for course choices, students' are more likely to select the instructor they consider a good teacher. Searching for instructors happens on a consistent basis, and consequently, higher education institutions have to reflect on how students' course selections may affect their institutions. Moreover, students' that experience positive interactions in their beginning course are more likely to stay in that discipline because they have established a rapport with the instructor.

The course selections students' make create a chain of reactions that influence future course choices, skill development, and job decisions (Babad, 2001). Moreover, students' make their course selections based upon positive experiences from the instructor, peers, or academic advisors. In addition, students choose subjects or activities for which they hold high expectations, because they anticipate positive self-evaluation as the result of working had on a subject or activity (Dickhauser, Reuter, & Hilling, 2005; Atkinson, 1964).

Based upon the findings of this study, students are drawn to courses in which the instructor displays student interest, encourages student involvement, establishes rapport, expects the students to take responsibility for their learning, and uses a variety of assessment methods. This study provides higher education institutions with information about what motivates students

to take a course and which instructor behaviors are related to students' desire to take a course from a specific instructor.

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